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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/603,067 | 06/24/2003 | Katsuyoshi Hiraki | 1324.68111 | 8618 |

7590 01/11/2006

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| EXAMINER |
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SHANKAR, VIJAY

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| ART UNIT | PAPER NUMBER |
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2673

DATE MAILED: 01/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/603,067

Applicant(s)

HIRAKI ET AL.

Examiner

VIJAY SHANKAR

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 27-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 5-8, 11-14, 16-17, 20-21, 23-24 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 9, 10, 15, 18, 19, 22, 25 and 26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election without traverse of Species I Claims 1-26 in the reply filed on 10-24-2005 is acknowledged.
2. Non-Elected Claims 27-39 should be Cancelled.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-2, 5-8, 11-14, 16-17, 20-21, 23-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Narui et al (6,816,131 B2).

Regarding Claims 1,7, 13,16,20,23, Narui et al teaches a driving method of a liquid crystal display device, comprising: a detection step of detecting a change of a vertical scanning frequency or a horizontal scanning frequency (Figures 5-8; Column 4, line 31- Col. 5, line 15; Col.5, line 40-Col.6, line 59); and an output step of outputting, when the change of the vertical scanning frequency or the horizontal scanning frequency is detected at the detection step, a gate-on voltage or a common voltage corresponding to the change. (Figures 7-9; Col.5, line 40-Col.6, line 59; Col.7, lines 41-65).

Regarding Claims 2,8,14,17,21,24, Narui et al teaches a driving method of a liquid crystal display device wherein at the detection step, it is judged whether the vertical scanning frequency or the horizontal scanning frequency exceeds a predetermined threshold value. (Column 4, line 31- Col. 5, line 15; Col.5, line 40-Col.6, line 59; Col.7, lines 41-65).

Regarding Claim 5, Narui et al teaches a driving method of a liquid crystal display device wherein at the output step, the gate-on voltage is generated in accordance with the change of the vertical scanning frequency or the horizontal scanning frequency. (Column 4, line 31- Col. 5, line 15; Col.5, line 40-Col.6, line 59).

Regarding Claims 6 and 11-12, Narui et al teaches a driving method of a liquid crystal display device further comprising a step of, when the change of the vertical scanning frequency or the horizontal scanning frequency is detected at the detection step, outputting a common voltage corresponding to the detected change. (Column 4, line 31- Col. 5, line 15; Col.5, line 40-Col.6, line 59).

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5. Claims 3-4, 9-10, 15, 18, 19, 22, 25-26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is an examiner's statement of reasons for allowance: The prior arts fails to teach a driving method of a liquid crystal display device wherein at the output step, when it is judged at the detection step that the vertical scanning frequency or the horizontal scanning frequency exceeds the predetermined threshold value, a high gate-on voltage as compared with a case where the vertical scanning frequency or the horizontal scanning frequency is the predetermined threshold value or lower is outputted as claimed in Claim 3.

The prior arts fails to teach a driving method of a liquid crystal display device wherein at the detection step, it is judged whether the vertical scanning frequency or the horizontal scanning frequency exceeds a first threshold value, and when it is judged that the vertical scanning frequency or the horizontal scanning frequency exceeds the first threshold value, it is judged whether the vertical scanning frequency or the horizontal scanning frequency falls below a second threshold value as claimed in Claim 4.

The prior arts fails to teach a drive control circuit of a liquid crystal display device wherein the detection circuit comprises: a first judgment circuit for judging whether the ambient temperature exceeds a first threshold value; and a second judgment circuit for judging, when it is judged that the ambient temperature exceeds the

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first threshold value, whether the ambient temperature falls below a second threshold value as claimed in Claim 25.

The prior arts fails to teach a drive control circuit of a liquid crystal display device wherein the output circuit outputs a first common voltage when the first judgment circuit judges that the ambient temperature exceeds the first threshold value, and outputs a second common voltage lower than the first common voltage when the second judgment circuit judges that the ambient temperature falls below the second threshold value as claimed in Claim 26.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIJAY SHANKAR whose telephone number is (571) 272-7682. The examiner can normally be reached on M-F 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, BIPIN SHALWALA can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Vijay Shankar', with a stylized, cursive script.

VIJAY SHANKAR
Primary Examiner
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VS